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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,053

05/16/2007

Dov Avni

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Pearl Cohen Zedek Latzer, LLP
1500 Broadway
12th Floor
New York, NY 10036

EXAMINER

BRUTUS, JOEL F

ART UNIT

PAPER NUMBER

3768

MAIL DATE

DELIVERY MODE

09/28/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,053	Applicant(s) AVNI ET AL.	
	Examiner JOEL F. BRUTUS	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 81,85,90,91 and 97-102 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 81,85,90,91 and 97-102 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/14/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 81, 85, 90-91 and 97-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (US Pat: 6,667,765) in view of Yamanaka et al (US Pat: 6,219,091) and further in view of Higuchi et al (US Pat: 6,254,531) and further in view of Fulghum (US Pat: 6,364,829).

Regarding claims 81, Tanaka in fig. 7 discloses an image pick-up apparatus comprising imaging device comprising: a light source (5), an imager (303, 2); and a controller (304), wherein the controller is configured to operate over a series of imaging periods and during each imaging period to acquire an image from the imager [see column 8 lines 26-43, column 5 lines 44-59].

Tanaka teaches a light control circuit 304 and senses a quantity of flash light (white light, emphasis added) reflected from the object. The light control circuit 304 controls a time of flashing of the flash unit 5 responding to the quantity of light sensed by the photo-sensor 305; controlling exposure time (thus illumination duration, emphasis added) [see column 5 lines 1-5, column 8 lines 1-25]. Tanaka teaches signal processing circuit 307 that comprises an automatic gain control (AGC) circuit 307b that adjusts levels of the image signals by adjusting the gain [see column 6 lines 10-20].

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Tanaka teaches a connector terminal 13 by which the camera is connected to a personal computer (PC) 18 (see FIG. 7). The image data taken by the image pickup unit 3 is processed by signal processing, displayed on monitor display 10, recorded and transmitted to the personal computer 18 [see column 3 lines 60-67].

Tanaka doesn't disclose operating the light source via one or more control pixels.

With regards to control pixels; Applicant disclose control pixels may be adapted for fast read out which is well known in the art [see 0129, specification and discloses control pixels may be CMOS imager pixels [see 0151, specification].

However, Fulghum teaches pixellated CMOS image device [see column 2 lines 63-67].

Nevertheless, Yamanaka et al disclose all pixels reading type electronic endoscope comprises a control circuit controlling light operation based on a plurality of pixels [see column 4 lines 17-30].

In addition, Higuchi et al disclose an image pick device comprises a plurality of pixels which are accumulated in an image pick up device and controlling light operation [see column 1 lines 10-15]

Therefore, one with ordinary skill in the art at the time the invention was made would have been motivated to combine Tanaka with Fulghum by using CMOS imager pixels and with Yamanaka et al by using the all pixels reading means and Higuchi et al by using the image pick up; in order to reduce the cost of the system and for accuracy purposes.

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Regarding claim 85, Tanaka teaches signal processing circuit 307 that comprises an automatic gain control (AGC) circuit 307b that adjusts levels of the image signals by adjusting the gain [see column 6 lines 10-20].

Regarding claims 90-91, Tanaka also teaches an exposure control time value (which is used as a threshold) and determine the amount of light based on exposure time (emphasis added and see column 5 lines 35-61]. Tanaka teaches comparing a difference time value with an exposure control step [see column 5 lines 35-61] and AGC circuit 307b amplifies the image signals by using the gain factor for compensating the insufficient exposure light quantity [see column 5 lines 35-61, column 8 lines 28-43].

As disclosed above the image data taken by the image pickup unit 3 is processed by predetermined signal processing, displayed on the monitor display 10, recorded on the memory card 17, and transmitted to the personal computer 18, if necessary [see column 3 lines 60-67].

Regarding claims 97-100, with regards to environment parameter and environmental measuring tool; Applicant discloses environment parameter such as Ph level, temperature level and light level [see 0219].

As disclosed here, Tanaka teaches light quantity receives by photo sensor 305 reaches a predetermined quantity, a lightning stop signal is outputted to the light control circuit to stop the illumination [see column 8 lines 26-44]. The photo sensor is used as

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an environmental measuring tool to detect light level by comparing to a predetermined level and stopping the illumination is changing a mode of the device (emphasis added).

Regarding claims 101-102, all other limitations are taught as set forth by the above teaching.

The controller can control the gain factor repeatedly during a plurality of time periods (emphasis added and see column 8 lines 15-25]

Response to Arguments

3. Applicant's arguments with respect to claims 81, 85, 90-91 and 97-102 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOEL F. BRUTUS whose telephone number is (571)270-3847. The examiner can normally be reached on Mon-Fri 7:30 AM to 5:00 PM (Off alternative Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. F. B./
Examiner, Art Unit 3768

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768